Appendix I

Aviation Maintenance Commander's Checklist

MAINTENANCE MANAGEMENT

I-1. Aviation maintenance commanders can use the following checklist to improve maintenance management:

- Does the unit have an adequate MTOE/MTDA for its mission? (DA Staffing Guide.)
- Are all authorized positions filled with qualified personnel? (AR 750-1.)
- Are there adequate SOPs covering all aspects of the unit's function and mission? (AR 385-95.)
- Are all personnel aware of and complying with unit SOP? (AR 385-95.)
- Are the following duties and positions designated in writing and current:
  - TIs. (DA Pam 738-751, FM 3-04.500[1-500].)
  - Weight and balance technician. (AR 95-1.)
  - Oil analysis monitor. (AR 750-1, TB 43-0106.)
  - Safety officer (or director) and safety NCO. (AR 385-95.)
  - Test pilot. (TM 1-1500-328-23.)
  - Building manager. (AR 420-90.)
  - Controlled exchange authority. (FM 3-04.500[1-500], AR 750-1.)
  - FOD officer. (AR 385-95.)
  - CPC officer. (TM 1-1500-328-23.)
- Are there frequent technical assistance or maintenance assistance instruction team visits to subordinate units? (FM 3-04.500[1-500].)
- Are personnel properly assigned in their primary or secondary MOS? (DA Pam 611-21.)
- Are unqualified or inexperienced personnel receiving properly planned and documented OJT? (FM 3-04.500[1-500].)
- Is there an aviation safety bulletin board in the maintenance area? (TM 1-1500-204-23-series.)
- Does the shop officer emphasize accident avoidance measures in maintenance operations? (AR 385-95, FM 3-04.500[1-500].)
- Is there an operation hazards program in effect to encourage reporting of hazards, near accidents, unsafe shop practices, and so forth? (AR 385-95.)
- Are supervisors aware of proper procedures for securing parts analyses for accident investigation purposes? (DA Pam 385-95.)
- Are weight and balance records complete, current, and properly maintained? (TM 55-1500-342-23, AR 95-1.)

- Are controls established to preclude unauthorized cannibalization and controlled exchange? (AR 750-1.)
- Are personnel aware of radioactive hazards and materials associated with aircraft repair?

QUALITY ASSURANCE

I-2. The Aviation maintenance commander ensures QA by inspecting the following forms and records:

- Are aircraft maintenance and flight forms and records properly filled out and filed? (DA Pam 738-751, local SOP, FM 3-04.500[1-500].)
- Are aircraft forms and records screened to ensure that all work accomplished is reflected on forms and records? (Appropriate phase book, preventive maintenance checklist, DA Forms 2408-13-1, 2408-13-2, 2408-13-3.)
- Are DA Form 2408-13-series forms retained in a maintenance organizational file for 6 months and then destroyed? (DA Pam 738-751.)
- Are DA Form 2408-16-series forms checked carefully for accuracy to prevent overflying the replacement times for aircraft components and subcomponents? (DA Pam 738-751.)
  - Are TBO charts or appropriate computerized equipment used to keep track of component replacement time? (FM 3-04.500[1-500].)
  - Are TBO charts kept current? (FM 3-04.500[1-500].)
- Does DA Form 1352-1 reflect the actual current status? (AR 700-138.)
- Does the unit maintain a safety-of-flight TWX file? (FM 3-04.500[1-500].)

I-3. The following calibration equipment and records are inspected to ensure QA:

- Is equipment calibrated in the specified time intervals and is it properly stored? (TB 43-180, TB 750-25, AR 750-43.)
- Are calibration records maintained by the unit and support activity? (TB 750-25.)

I-4. The following AOAP items are checked to ensure QA:

- Are all assigned aircraft under the AOAP? (AR 750-1, TB 43-0106.)
- Is the AOAP functioning according to appropriate regulations and directives?

I-5. The following safety items are checked to ensure QA:

- Are safety inspection and testing of lifting devices being monitored? (TB 43-0142.)
  - Are forms and records maintained? (TB 43-0142.)
  - Are items properly marked with load rating, next periodic inspection date, and internal load test? (TB 43-0142.)
- Does the unit actively participate in the submission of DR and EIR using SF 368 (Product Quality Deficiency Report)? (DA Pam 738-751.)
- Are aircraft inspected according to established aircraft maintenance procedures within required inspection intervals? (TM 1-1500-328-23.)
- Do QC personnel conduct in-progress inspections of products to assure reliability of complete assembly? (FM 3-04.500[1-500].)
- Are work area and hangar safety inspections being conducted by QC personnel periodically per FM 3-04.500(1-500)? (FM 3-04.500[1-500].)

I-6. The following publications are checked to ensure QA:

- Are aircraft maintenance publications current, available, and used? (DA Pam 25-30, FM 3-04.500[1-500].)
- Do aircraft maintenance areas have the appropriate quantities of applicable manuals for assigned work?
- Are DA Form 12-series forms available and up-to-date?
- Are appropriate publications used at all times when working on aircraft? (AR 385-95.)
- Are required publications carried aboard each aircraft? (AR 95-1.)
- Is there a policy requiring QC and maintenance personnel to familiarize themselves with publications, using a technical data familiarization chart or by initialing the TM? (FM 3-04.500[1-500].)

MAINTENANCE WORK AREA

I-7. The Aviation maintenance commander inspects the following area in the MWA:

- Do maintenance supervisors ensure that accident prevention measures are included in the maintenance annex to the unit SOP and that they are complied with in all maintenance operations? (FM 3-04.500[1-500].)
- Do personnel using power tools (drills, grinders, lathes, torches, and so forth) wear PCE? (AR 385-10, OSHA.)
- Shop/hangar safety markings.
  - Are proper color-coded signs posted in hazardous areas? (TM 1-1500-204-23-series)
- Fire prevention.
  - Are smoking and no-smoking areas designated, and are no-smoking signs posted? (TM 1-1500-204-23-series)
  - Are the required number and types of fire extinguishers available in the shops and hangar? (TM 1-1500-204-23-series)
  - Are shop and hangar fire extinguishers inspected as required? (TM 1-1500-204-23-series.)
  - Are shop and hangar personnel trained in the use of fire-fighting equipment? (FM 3-04.500[1-500].)
  - Are there enough grounding points to adequately support the unit's aircraft parking areas and maintenance facility? (FM 4-20.12[10-67-1].)
  - Is the entire grounding system for which the unit is responsible inspected annually? (FM 4-20.12[10-67-1].)
  - Are all ground rods for which the unit is responsible tested every 2 years or when there is a possibility of mechanical damage? (FM 4-20.12[10-67-1].)
  - Does the unit keep a log that identities each rod the date tested, and the reading in ohms? (FM 4-20.12[10-67-1].)
- Foreign object damage prevention.
  - Is the FOD prevention annex to the unit SOP adequate? (AR 385-95.)

- Is a specified time established for policing aircraft parking areas, run-up areas, exhaust areas, run-ways, and taxiways? Is the policing done as established? (TM 1-1500-204-23-series, AR 385-95.)
- Are there enough FOD receptacles in all work areas for trash, ferrous and nonferrous scrap, safety wire, and so forth? (TM 1-1500-204-23-series, FM 3-04.500[1-500], AR 385-95.)
- Is a checklist of all maintenance areas completed? (AR 385-95.)

- General maintenance practices.
  - Are parts and items that have been removed from aircraft properly marked and stored? (DA Pam 738-751, FM 3-04.500[1-500].)
- Housekeeping.
  - Are shops and hangars kept clean and free of grease and oil on floors? (FM 3-04.500[1-500].)
  - Are shops, shop sets, and hangars well arranged and uncluttered? (FM 3-04.500[1-500].)
  - Are clean-up periods established and followed? FM 3-04.500[1-500].)
- Use of oxygen. Are oxygen gaseous cylinders stored in a separate location away from aircraft servicing and maintenance areas of aircraft hangars? (Exception is cylinders scheduled to be installed in aircraft.) (NFPA 410.)
- Ground support equipment.
  - Are equipment and vehicle operators properly trained and thoroughly familiar with the operation, handling, care, and maintenance of equipment and vehicles? (AR 600-55, AR 385-95, FM 3-04.500[1-500].)
  - Are vehicle operators properly licensed? (AR 600-55.)
  - Are ground support equipment (APU, generator) operators properly licensed? (TB 600-1, TM 1-1500-204-23-series.)
  - Are maintenance and operator manuals located with the equipment? (TM 1-1500-204-23-series, FM 3-04.500[1-500].)
  - Are maintenance records kept on equipment? (DA Pams 738-750 and 738-751.)
  - Is ground-handling equipment reflectorized? (TM 1-1500-204-23-series.)
  - Is all GSE under a 180-day corrosion-preventive control program? (TB 1-1500-328-23, Section X.)
- Maintenance paint shop.
  - Are more paint and solvents stored in the paint shop than will be used during one work shift? (FM 3-04.500[1-500], TM 1-1500-204-23-series.)
  - Are fire extinguishers provided throughout the shop area? (FM 3-04.500[1-500], TM 1-1500-204-23-series, DA Pam 385-1, OSHA.)
  - Is all electrical equipment in the paint shop explosion-proof? (FM 3-04.500[1-500].)
  - Are smoking restrictions posted and enforced? (TM 1-1500-204-23-series.)
  - Are flammable liquid containers marked? (TM 1-1500-204-23-series.)

BATTERY SHOP MAINTENANCE

I-8. The Aviation maintenance officer ensures the following battery shop maintenance requirements are met:

- Training.
  - Are battery maintenance personnel formally trained (MOS 68F) in the care of nickel-cadmium batteries? (FM 3-04.500[1-500].)
  - Are battery maintenance personnel thoroughly trained in charging, discharging, and testing procedures? (TM 11-6140-203-23, TB 385-4.)
- Equipment. Are the following safety items available in or near the battery shop and used when needed:
  - Eyewash or shower within 25 feet of the work area? (FM 3-04.500[1-500], OSHA Std 1926.403[a][6].)
  - Correct fire extinguisher? (FM 3-04.500[1-500], TB 385-4.)
  - Aprons, rubber gloves, and face shield or goggles (all provided as part of tool kit, TK 90/16)? (TM 11-6140-203-23, TB 385-4.)
  - A safety board with all required items posted according to TB 385-4? (FM 3-04.500[1-500].)
- Ventilation
  - Is the battery-charging area adequately ventilated to prevent accumulation of explosive gases? (NFPA 410, TM 11-6140-203-23.)
  - Does mechanical ventilation (when required) conform to the type approved for use in Class 1, Group B, hazardous locations as defined in NEC 500 and 513? (NFPA 70 and NFPA 410.)
  - Do exhaust ducts lead directly to the outside, above roof level, where fumes cannot accumulate? (NFPA 410.)
- Safety. How have the commander, safety officer, and supervisory personnel ensured the following:
  - The battery shop has an operational SOP? (TB 385-4.)
  - Facilities are provided for flushing and neutralizing spilled electrolyte? (OSHA Std 1910.178[g][2].)
  - Arc-proof switches are installed? (OSHA Std 1910.178[g][11].)
  - Tools and other conductive materials are stored or placed where they cannot fall into batteries, causing a short circuit and hydrogen ignition. (OSHA Std 1910.178 [g][1]), FM 3-04.500[1-500], TB 385-4.)
  - All shop personnel remove all jewelry while working with batteries. (NFPA 410, FM 3-04.500[1-500].)
  - Necessary inspections, cleaning, and repairs are accomplished before charging, (FM 3-04.500[1-500].)
  - Charging equipment is energized after the battery has been connected to the circuit. (TM 11-6140-203-14-1.)
  - Water or electrolyte is added to the battery only when fully charged and stabilized for at least 30 minutes. (TM 11-6140-203-23.)

- Nonseal batteries are located in enclosures with outside vents or in well ventilated rooms and arranged to prevent the escape of fumes, gases, or electrolyte spray into other areas. (OSHA Std 1926.403[a][2].)
- Lead-acid batteries are stored separately from NICAD batteries. (TM 11-6140-203-23.)
- Acids are properly stored.
- Cell shorting straps are used to completely discharge cells to 0 volts. (TM 11-6140-203-23.)
- Maintenance personnel monitor the voltage of individual cells at regular intervals during charge and discharge cycles. (FM 3-04.500[1-500], TM 11-6140-203-23.)
- Discharge times are strictly followed during battery capacity tests. (TM 11-6140-203-23, FM 3-04.500[1-500].)
- MSDS are posted? (AR 700-141.)

AVIONICS/ELECTRICAL

I-9. The Aviation maintenance officer ensures the following avionics and/or electrical requirements are met:

- Training:
  - Does the unit have a training program to educate personnel in safety procedures and lifesaving techniques appropriate to the work being performed? (AR 385-10.)
  - Have electrical MOSs completed initial training in CPR with annual refresher updates annotated by installation safety officer?
- Test equipment.
  - Are calibration requirements for test equipment kept up-to-date? (TB 750-25.)
  - Is all test equipment properly grounded? (TB 385-4.)
- Safety. How does the commander ensure knowledge of and compliance with the following:
  - Does the unit have an adequate avionics maintenance SOP? (TB 385-4.)
  - A mounted safety board is present in the shop. (TB 385-4.)
  - Rubber floor mats or similar insulating materials are provided for repair positions. (TB 385-4, FM 3-04.500[1-500].)
  - All power attachment plugs and connectors are serviceable with no exposed current-carrying parts except the prongs. (OSHA Std 1910.305, FM 3-04.500[1-500].)
  - All physical and high-voltage hazards have been identified and marked according to TM 1-1500-204-23-series. (FM 3-04.500[1-500].)
  - Is the operational readiness float program established and maintained? (AR 750-1.)
  - Are unserviceable and nonrepairable items being turned in promptly? (AR 750-1.)

- Are technical inspections of repairable equipment being accomplished? (FM 3-04.500[1-500].)
- Are necessary technical publications on hand and current? (DA Pam 25-30, FM 3-04.500[1-500].)

TECHNICAL SUPPLY

I-10. The Aviation maintenance officer ensures the following technical supply requirements are met:

- Is the unit required to maintain a PLL? (DA Pam 710-2-1.)
  - Is the PLL properly computed and current? (DA Pam 710-2-1.)
  - Are PLL items replenished as used? (DA Pam 710-2-1.)
  - Is the unit's ASL current (reviewed within the last 6 months)? (AR 710-2.)
  - Are the document register and other documents current and posted correctly? (DA Pam 710-2-1.)
  - Does the stockage location of each RX item coincide with the location listed on the title insert (DA Form 3318)? (DA Pam 710-2-1.)
  - Are supplies in open storage preserved to withstand exposure to elements? (TMs 743-200-1 and 743-200-3.)
  - When covering supplies (stored outside) with tarpaulins or other such materials, is a 12- to 18-inch clearance maintained between the bottom of the covering and the ground? (TMs 743-200-1 and 743-200-3.)